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Attorney Docket No. 9568-2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Heidner et al.

Application No.: 10/593,841 ✓

Filing Date: September 22, 2006

For: Methods and Compositions Comprising Protein L Immunoglobulin Binding Domains for Cell-Specific Targeting

Confirmation No. 3235

Group Art Unit: 1648

Date: January 4, 2007

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Commissioner for Patents
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**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b).**

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the amendment by the U.S. Patent and Trademark Office to 37 C.F.R. § 1.98(a)(2)(ii) effective October 21, 2004.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

Respectfully submitted,

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Tracy Wallace
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 Of 2

Complete if Known

Application Number	10/593,841
Filing Date	September 22, 2006
First Named Inventor	Heidner et al.
Group Art Unit	1648
Examiner Name	Unknown
Attorney Docket Number	9568-2

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
	1.	US 5,965,390		Bjorck et al.	10/12/1999
	2.	US 6,162,903		Trowern et al.	12/19/2000

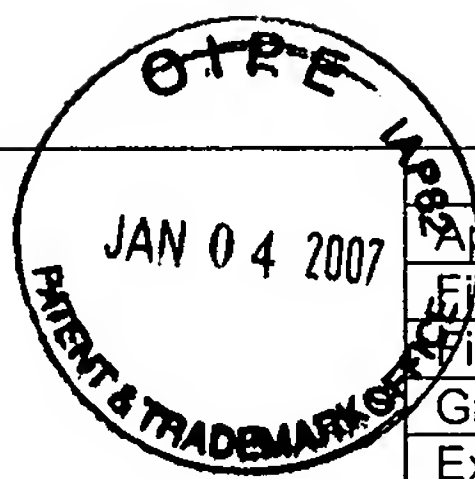
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Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Kind Code (if known)			
	3.	WO	02/08263	A2	Got-A-Gene AB	011/31/2002	
	4.	WO	01/43769	A2	Actinova Limited	06/21/2001	
	5.	WO	99/15563		Amrad Operations Pty. Ltd.	04/01/1999	
	6.	WO	93/22342		Hightech Receptor AB	11/11/1993	

OTHER NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
	7.	Bouvet. "Immunoglobulin Fab Fragment-Binding Proteins" <i>Int. J. Immunopharmacol.</i> 16(5/6):419-424 (1994)	
	8.	Copy of International Search Report for PCT/US2004/013281, mailed December 9, 2004	
	9.	Davis et al. Sindbis virus E2 glycoprotein gene, Genbank Accession No. M13818, August 3, 1993	
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	14.	Heidner (October 30, 2003) Slides shown at seminar at the University of Texas Health Science Center at San Antonio (3 pp.)	
	15.	Housden et al. "Immunoglobulin-binding domains: Protein L from <i>Peptostreptococcus magnus</i> " <i>Biochem Soc Trans.</i> 31(Pt 3):716-718 (2003)	
	16.	Huston et al. "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in <i>Escherichia coli</i> " <i>Proc. Natl. Acad. Sci.</i> 85:5879-5883 (1988)	
	17.	Iijima et al. "Cell-Specific Targeting of a Thymidine Kinase/Ganciclovir Gene Therapy System Using a Recombinant Sindbis Virus Vector" <i>Int. J. Cancer</i> 80:110-118 (1999)	
	18.	Kastern et al. <i>Peptostreptococcus magnus</i> Protein L gene, Genbank Accession No. M86697, April 26, 1993	
	19.	Kastern et al. "Structure of <i>Peptostreptococcus</i> Protein L and Identification of a Repeated Immunoglobulin Light Chain-binding Domain" <i>The Journal of Biological Chemistry</i> 267(18):12820-12825 (1992)	
	20.	Kastern et al. "Protein L, a Bacterial Immunoglobulin-Binding Protein and Possible Virulence Determinant" <i>Infection and Immunity</i> 58(5):1217-1222 (1990)	
	21.	Klimstra et al. "Targeting Sindbis virus-based vectors to Fc receptor-positive cell types" <i>Virology</i> 338(1):9-21 (2005)	
	22.	McKnight et al. "Deduced Consensus Sequence of Sindbis Virus Strain AR339: Mutations Contained in Laboratory Strains Which Affect Cell Culture and In Vivo Phenotypes" <i>Journal of Virology</i> 70(3):1981-1989 (1996)	

Substitute form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/593,841
		Filing Date	September 22, 2006
		First Named Inventor	Heidner et al.
		Group Art Unit	Unknown
		Examiner Name	Unknown
		Attorney Docket Number	9568-2
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23.	Morizono et al. "Antibody-Directed Targeting of Retroviral Vectors via Cell Surface Antigens" <i>Journal of Virology</i> 75(17):8016-8020 (2001)
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27.	Ohno et al. "Cell-specific targeting of Sindbis virus vectors displaying IgG-binding domains of protein A" <i>Nature Biotechnology</i> 15:763-767 (1997)
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29.	Regnault et al. "Fcγ Receptor-mediated Induction of Dendritic Cell Maturation and Major Histocompatibility Complex Class I-restricted Antigen Presentation after Immune Complex Internalization" <i>J. Exp. Med.</i> 189(2):371-380 (1999)
30.	Rice et al. "Nucleotide sequence of the 26S mRNA of Sindbis virus and deduced sequence of the encoded virus structural proteins" <i>Proc. Natl. Acad. Sci.</i> 78(4):2062-2066 (1981)
31.	Sawai et al. "Cell-Specific Transfection of Choriocarcinoma Cells by Using Sindbis Virus hCG Expressing Chimeric Vector" <i>Biochem Biophys Res Commun.</i> 248(2):315-323 (1998)
32.	Schuurhuis et al. "Antigen-Antibody Immune Complexes Empower Dendritic Cells to Efficiently Prime Specific CD8 ⁺ CTL Responses <i>in Vivo</i> " <i>The Journal of Immunology</i> 168:2240-2246 (2002)
33.	Smith et al. "Whole-body autoradiography reveals that the Peptostreptococcus magnus immunoglobulin-binding domains of protein L preferentially target B lymphocytes in the spleen and lymph nodes <i>in vivo</i> " <i>Cellular Microbiology</i> 6(7):609-623 (2004)
34.	Strauss et al. Sindbis virus, complete genome, Genbank Accession No. NC_001547, January 12, 2004
35.	Viau et al. "Specific <i>In Vivo</i> Deletion of B-Cell Subpopulations Expressing Human Immunoglobulins by the B-Cell Superantigen Protein L" <i>Infection and Immunity</i> 72(6):3515-3523 (2004)
36.	Volpers et al. "Antibody-Mediated Targeting of an Adenovirus Vector Modified to Contain a Synthetic Immunoglobulin G-Binding Domain in the Capsid" <i>Journal of Virology</i> 77(3):2093-2104 (2003)

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.